

AMENDMENT UNDER 37 C.F.R. § 1.111  
Appln. No. 10/039,333

PATENT APPLICATION

REMARKS

Reconsideration and further examination of this application is hereby requested. Claims 1-21 are currently pending in the application. Claims 1-3, 10-12, and 19-21 have been amended.

**A. The Anticipation Rejection**

Claims 1-4, 7, and 8 have been rejected under 35 U.S.C. § 102(a) as being anticipated by Kumar (EP 0837497). This rejection is respectfully traversed based on the following arguments.

In order for a patent claim to be anticipated, each and every limitation of that claim must be found within the four corners of a single prior art reference. That is the law of anticipation.

Independent claim 1 (as amended) is directed to a method of "etching a layer of substantially pure tungsten." See claim 1 at lines 1, 2, 8, and 9.

The Kumar reference does not disclose a method of this sort. Kumar teaches etch of tungsten silicide, not substantially pure tungsten.

Accordingly, Applicant respectfully requests that the anticipation rejection of claims 1-4, 7, and 8 be withdrawn.

**B. The Obviousness Rejections**

Claims 5-6 and 9-18 have been rejected under 35 U.S.C. §

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103(a) as being obvious over Kumar in view of Qian (US 6136211).

Claims 19-21 have been rejected under 35 U.S.C. § 103(a) as being obvious over Kumar in view of Qian, and further in view of Davis (US 5164330). These rejections are traversed based on the following arguments.

In order for a patent claim to be obvious, the prior art must teach or suggest each and every limitation of the claim. That is because the claim must be considered as a whole.

Independent claim 1 (as amended) is directed to a method of "etching a layer of substantially pure tungsten, the layer being disposed on a substrate and having a patterned hard mask layer disposed thereon." See claim 1 at lines 1-4 and 8-11.

Independent claim 10 (as amended) is also directed to a method of "etching a layer of substantially pure tungsten that is covered with a patterned hard mask layer." See claim 10 at lines 1-3, 12-14, and 17-19. Independent claim 19 (as amended) is also directed to a method of "etching a layer of substantially pure tungsten that is covered with a patterned hard mask layer." See claim 19 at lines 1-3, 12-14, 16-19, 22-24, and 26-29.

When considered together, the Kumar, Qian, and Davis references do not teach or fairly suggest these limitations. The Kumar reference does not disclose a method of this sort. Kumar teaches etch of tungsten silicide, not substantially pure

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tungsten. The Qian reference teaches etch of metal silicide, silicon nitride, polysilicon, or monocrystalline silicon, not substantially pure tungsten. The Davis reference does not disclose etch with high selectivity to a patterned hard mask.

Accordingly, Applicant respectfully requests that the Examiner carefully reconsider and withdraw the obviousness rejections of claims 5-6, 9-18, and 19-21.

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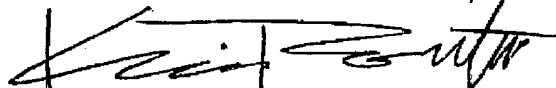
**C. Closing**

In view of the above, Applicant respectfully submits that independent claims 1, 10, and 19 are patentable over the prior art of record. Applicant further submits that dependent claims 2-9, 11-18,, 20, and 21 are patentable, at least as being dependent from patentable independent claims, and are further patentable due to the additional limitations recited therein.

For the above reasons, Applicant respectfully submits that the application is in condition for allowance with claims 1-21. If there remain any issues that may be disposed of via a telephonic interview, the Examiner is kindly invited to contact the undersigned at the telephone number given below.

Respectfully submitted,

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